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The five hundred and thirty-fifth meeting was held at the Rembrandt Hotel, South Kensington, on Tuesday, 14th December, 1954, following a dinner at 6.30 p.m.

Chairman : COLONEL R. MEINERTZHAGEN.

Members present, 33 ; Guests 8 ; Guest of the Club, Dr. A. J. Marshall ; Total 42.

Dr. A. J. Marshall gave a most interesting talk on the Physiology of Bird Behaviour.

He dealt mainly with the hormonal and central nervous control of behaviour and discussed the effect of rain on breeding in areas normally subjected to drought. He was of the opinion that increase of light may not be such an important factor in bringing birds into breeding condition as has been thought, and that food, heat or rain may also play a part.

Geographical Variation in the Fairy Flycatcher *Stenostira scita* (Vieillot) of South Africa

by MR. P. A. CLANCEY

Received 15th November, 1954

The Fairy Flycatcher *Stenostira scita* (Vieillot) is a delicate and diminutive warbler-like flycatcher confined to South Africa. It inhabits the drier parts of the sub-continent, frequenting thorn tangles and bushy places from the arid parts of extreme southern Great Namaqualand and the western Cape Province to the Basutoland highlands and the thornveld savanna country of upper Natal, the Transvaal, and immediately adjacent southern Portuguese East Africa. Adequate material for a valid study of geographical variation is not generally available to workers, and to the best of my knowledge no critical appraisal of the various populations has

ever been undertaken, Sclater, "Systema Avium Æthiopicarum," part ii, 1930, p. 428; Roberts, "Birds of South Africa", 1940, p. 287; and Vincent, "Check List of the Birds of South Africa", 1952, p. 69, among recent workers, treating the species binominally. Study of material preserved in South African collections now shows that there is, in fact, demonstrable and taxonomically important geographical variation, the populations to the east of the range being appreciably larger and generally darker than those of the west.

The distinctive avian species was described originally as *Muscicapa scita* by Vieillot on the basis of information and figures given by the early naturalist-traveller, Francois Levaillant, in his "Histoire Naturelle des Oiseaux d'Afrique", vol. iv, 1805, p. 14, pl. 154. Levaillant first encountered his "Le Gobe Mouches Mignard", or simply "Le Mignard", in the region of the lower Orange River in the north-western Cape Province of South Africa, which general area must be accepted as the type-locality of the bird which we now know as *Stenostira scita*. Of the populations resident in the western and north-western parts of the Cape, material which has been examined from Goodhouse (on the Orange River), Calvinia and Klaver can be taken for all practical purposes as topotypical. Birds of these western populations have wings 47–50 mm., and are generally olivaceous or slate grey on the dorsal and pectoral surfaces. It should be noted that there is much variation in the intensity of shade of grey, and a measure of this is certainly sexual, males being generally darker than females. Birds agreeing in all essential details with those of the topotypical populations have been examined from a variety of places in the Cape Province and parts of the Orange Free State—Tarkastad, Aliwal North, Barkly West and Bloemfontein being precise localities.

To the east of the populations just discussed, one finds birds significantly larger and generally darker and more bluish on the upper-parts and breast, particularly in the males. Specimens exhibiting such characters have been examined from Basutoland (Maluti Mountains; Mamathes), Orange Free State (Heuningspruit Station), Transvaal (Bloemhof, Pretoria, Nylstroom, Waterberg district, Klaserie, etc.), Natal (Colenso, Ladysmith), and southern Portuguese East Africa (Umbelúzi River, near Lourenço Marques). The wings of 14 specimens of this group of populations range from 50–55 mm., and show a difference in size when compared with western birds which is statistically significant.

As there is a considerable measure of individual variation in colour, any projected discrimination of eastern and western sub-species of *S. scita* must be based almost exclusively on mensural characters. Using the formula given by Mayr, Linsley and Usinger in their indispensable "Methods and Principles of Systematic Zoology", 1953, p. 146, it is found that a series of 9 specimens of the western populations of *S. scita* with wings 47–50 mm. (mean 49.3 mm. S.D. 1.005) when compared against one of 14 specimens of the eastern populations with wings 47–50 mm. (mean 52.6 mm. S.D. 1.496) gives a C.D. (coefficient of difference) value of 1.32, which is above the level of conventional sub-specific difference (joint non-overlap, per cent = 91). Resulting from this critical test, it would seem advisable to distinguish two sub-species of *S. scita*, the characters, ranges and nomenclature of which can be defined as follows:

1. *Stenostira scita scita* (Vieillot)

Muscicapa scita Vieillot, "Nouveau Dictionnaire d'Histoire Naturelle", nouvelle édition, vol. xxi, 1818, p. 474: Lower Orange River, north-western Cape Province, South Africa. Ex Levaillant.

Adult Male: Upper-parts slate or olivaceous grey; supercilia white; lores, areas under eyes and ear-coverts jet black; throat dull white with suffusion of apricot; breast, sides of the body and flanks grey; abdomen dull white with suffusion of apricot in centre. Wings black with prominent white horizontal stripe. Tail black, first three pairs of rectrices prominently marked with white. Irides, dark brown; bill, legs and toes, black.

Adult female: Similar to adult male, but usually paler above.

Measurements: Wings (flattened) 47-50 (49.3), tails 49-55 mm. (Nine specimens measured).

Range: Widely but locally distributed throughout most of the drier areas of the Cape Province and in contiguous districts of southern Great Namaqualand, and also in parts of the western Orange Free State.

2. *Stenostira scita rudebecki*, *subsp. nov.*

Closely similar to *S. s. scita* as defined above, but usually darker and more bluish grey dorsally and on the breast. Larger in size.

Measurements: Wings (flattened) 50-55 (52.6), tails 51.5-57 mm. (Fourteen specimens measured.)

Type: ♂, adult. Collected on the banks of the Umbelúzi River, near Lourenço Marques, southern Portuguese East Africa, by F. O. Noomè, 18th May, 1911. In the collection of the Transvaal Museum, Pretoria.

Range: The highlands of Basutoland and adjacent areas of the Orange Free State, upper Natal, the Transvaal and contiguous districts of southern Portuguese East Africa.

Note: Named for Dr. G. Rudebeck, Ornithologist of the Transvaal Museum, in recognition of the many services which he has rendered me in furtherance of recent systematic studies.

A New Lark from British Somaliland

by MR. C. M. N. WHITE

Received 1st December, 1954

Calandrella rufescens vulpecula subsp. nov.

Description: differs from *C. r. somalica* (Sharpe), *C. r. athenis* (Sharpe) and *C. r. megaensis* (Benson), with which it has been compared in having the feather edges of the upper side foxy rufous, especially so on the head top; the dark feather centres are rather dull as in *C. r. somalica* and not so black as in *C. r. athenis* and *C. r. megaensis*; the whole under side ground colour washed with pale vinous pink and not white as in the other races, the ground colour of the breast more strongly and more rufous tinged; the white of the outer tail feather tinged with pinkish.

Distribution: only known from the red soils of the Haud about Bohoteh in southern British Somaliland and one specimen from similar country 40 miles south east of Burao.